# A Geospatial Decision Support System Toolkit, Phase I



Completed Technology Project (2014 - 2014)

#### **Project Introduction**

We propose to design a working prototype Geospatial Decision Support Toolkit (GeoKit) that will enable scientists, agencies, and stakeholders to configure and deploy their own web based applications containing maps, forms, algorithms, and a rich set of functionality related to visualization, analysis, querying, and publication of geospatial data and information. GeoKit will focus on development of a suite of tools that will operate on data, to create rule-based applications for risk analysis, risk mitigation, operations management, and science research support. GeoKit will enhance the the use of data from NASA and other sources, provide a tool for non-software developers to create a website with custom functions and tools that operate on geospatial data, and provide a framework for development of new tools to support risk assessment, risk management, and operational analysis of spatially- explicit data from NASA platforms, climate reanalyses, and user-defined sources, as well as allow real-time publication of results in standard geobrowser compatible formats.

#### **Primary U.S. Work Locations and Key Partners**





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#### Small Business Innovation Research/Small Business Tech Transfer

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| Organizations<br>Performing Work | Role                       | Туре           | Location                                |
|----------------------------------|----------------------------|----------------|---|
| Applied<br>Geosolutions, LLC     | Lead<br>Organization       | Industry       | Durham, New<br>Hampshire                |
| Stennis Space<br>Center(SSC)     | Supporting<br>Organization | NASA<br>Center | Stennis Space<br>Center,<br>Mississippi |

| Primary U.S. Work Locations |               |
|-----------------------------|---------------|
| Mississippi                 | New Hampshire |

#### **Project Transitions**

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June 2014: Project Start



December 2014: Closed out

#### **Closeout Documentation:**

• Final Summary Chart(https://techport.nasa.gov/file/140607)

### **Images**



#### **Briefing Chart**

A Geospatial Decision Support System Toolkit, Phase I (https://techport.nasa.gov/imag e/129714)

# Organizational Responsibility

# Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

#### **Lead Organization:**

Applied Geosolutions, LLC

#### **Responsible Program:**

Small Business Innovation Research/Small Business Tech Transfer

## **Project Management**

#### **Program Director:**

Jason L Kessler

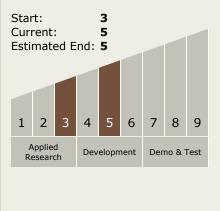
#### **Program Manager:**

Carlos Torrez

#### **Principal Investigator:**

Bobby H Braswell

# Technology Maturity (TRL)





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# **Technology Areas**

#### **Primary:**

- TX11 Software, Modeling, Simulation, and Information Processing
  - ☐ TX11.4 Information Processing
    - ☐ TX11.4.2 Intelligent Data Understanding

# **Target Destinations**

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System

